Volume 19
Number 6 *The Iowa Homemaker vol.19, no.6*

Article 3

1939

From Simpleton to Smartie

Lois Madsen
Iowa State College

From Simpleton to *Smartie!*

Facts about I. Q. from a psychologist, as told by Lois Madsen

A REVOLUTION is taking place in the theories on intelligence quotients, for after years of saying that an I.Q. cannot change, psychologists suddenly announce that they do.

Blame for poor work is often placed on a low I.Q. rating which was taken several years before. "That is about as well as I can do," we hear people say when final grades arrive. "My I.Q. is only medium."

If tests which are being made at the University of Iowa, prove to be true, this excuse will be baseless, for Beth L. Wellman, professor of child psychology at the state university, declares that she has made observations which will change the whole trend of thought in this line.

For 15 years she has watched and studied the intellectual growth of children in the supervised schools and preschools. Provisions have been made for children to enter the university preschools and to complete all of their education through high school, into college and receive a doctor of philosophy degree under the observation of university psychologists. No one has completed this schedule of study, begun in 1921, but some of the first groups entered college training in 1936.

The theory of the intelligence quotient, which is explained as the mental age divided by the age in years, was shattered for Miss Wellman when she found a change of from 10 to 20 points over a 5 year period.

Older sources have clung closely to the theory that the intelligence quotient varies scarcely at all when a child remains in the same type of environment. Environment is one of the conditions that leaders in this thought must hold constant to prove their discoveries correct. In other words, it has been the belief that if conditions remain the same, intelligence will increase proportionally with age.

Records of the university observations show many cases of the Billy, the Johnnys and the Marys who have entered the school as just another student of low or average I.Q. and have graduated as the heads of their classes. Typical is Sally, who entered preschool at the age of three years with an intelligence quotient of 89 (an I.Q. of 100 is average). When she was four and a half years old, Sally's quotient had increased steadily to a superior rating of 129. Her I.Q. remained in the superior bracket.

Johnny found that changing schools and environments changed his intelligence level. His case history is also interesting for he gained 20 points in his first year of pre-school so that he acquired a genius level with an I.Q. of 141. In his vacation his standard did not change but during his second year of preschool his quotient reached the high peak of 150. He then changed to a different school, still under the eye of the university observers. Five years later his tests showed 144 and at thirteen and a half years he tested 130.

On and on the records go, with example after example which show similar fluctuations. Previously, it has been supposed that no more than one or two children in a thousand change this much. Changes in the university schools were sufficient to shift the intelligence classifications so that the average became superior and the superior became very superior. Those formerly in the very superior groups did not change as much as those in the lower groups.

This fluctuation in I.Q. has not been discovered in other schools, indicating that it may be superior methods of teaching and general conditions at the University of Iowa. In groups of students from typical Iowa schools few students continued to gain after they left the preschool, whereas the I.Q. of those who attend the university schools often continue to rise.

Observers believe that the method of teaching is fundamental in the rise of I.Q. Children make the best gain when they are taught to think for themselves rather than to follow directions blindly. Stimulus from those with higher intelligence is instrumental in raising the rate, for it was shown that the very superior did not gain as many points as those in the medium bracket. Pupils will tend to do their best for the instructor who encourages them and expects a lot from them.

Miss Wellman believes that preschool is important in the education of any child for it is then that they make the greatest gains in I.Q. The I.Q. rises on the average of about six points in the first year of preschool and an additional four or five points in the second year. If the children start the year below average, they may gain 15 points in a semester. Those who are average will gain about 10 points in I.Q. and the superior students will raise the intelligence quotient four or five points. During vacations there has been little change noted.

Intelligence quotient, according to Miss Wellman, is not a matter of inheritance, but is one of good environment, superior instruction and intelligent learning. If the University of Iowa's experiments are accepted, there seems to be nothing to hinder the development of a person of below average mentality from becoming a near-genius, if he desires and has advantageous environmental opportunities.